ABSTRACT OF THE DISCLOSURE

An orthogonal complex spreading method for a multichannel and an apparatus thereof are disclosed. The method includes the steps of complex-summing $\alpha_{n1}W_{M,n1}X_{n1}$ which is obtained by multiplying an orthogonal Hadamard sequence $W_{M,n1}$ by a first data X_{n1} of a n-th block and $\alpha_{n2}W_{M,n2}X_{n2}$ which is obtained by multiplying an orthogonal Hadamard sequence $W_{M,n2}$ by a second data X_{n2} of a n-th block; complex-multiplying $\alpha_{n1}W_{M,n1}X_{n1}+j\alpha_{n2}W_{M,n2}X_{n2}$ which is summed in the complex type and $W_{M,n3}+jPW_{M,n4}$ of the complex type using a complex multiplier and outputting as an in-phase information and quadrature phase information; and summing only in-phase information outputted from a plurality of blocks and only quadrature phase information outputted therefrom and spreading the same using a spreading code.

54